

EXHIBIT A.521

(5 of 17)

population, and then rescaled to Palestine by multiplying per-capita spending by West Bank and Gaza population figures.⁸⁸

Based on the U.S. costs in rebuilding Iraq, it is reasonable to expect that at least \$612.1 million per year would be necessary to rebuild a Palestinian state's internal security system.⁸⁹ The cost over ten years could range from \$7.0 billion, assuming 3 percent population growth in Palestinian territory, to \$7.7 billion, assuming 5 percent growth.

We note two important caveats to these estimates. First, we did not adjust Palestinian population figures to account for possible immigration of Palestinian refugees from outside the West Bank and Gaza to a Palestinian state. If such immigration is substantial, our estimates will understate the amount of assistance necessary for successful reconstruction. Second, our estimates for the cost of rebuilding Iraq may be slightly understated, since they include only U.S. costs. Although the United States has incurred the vast majority of international costs in rebuilding Iraq's internal security system, several other countries have also provided assistance.

Cost Summary

As Table 3.5 highlights, we estimate that general reconstruction costs for rebuilding the Palestinian internal security system could be approximately \$612.1 million. The cost for general reconstruction over ten years could range from \$7.0 billion, assuming 3 percent population growth in Palestinian territory, to \$7.7 billion, assuming 5 percent growth (see Table 3.6).

⁸⁸ President of the United States (2004); Operating and Expenditure data are 2005 estimates from *Iraq Budget, 2004–2006* (2004).

⁸⁹ This estimate is slightly higher than current funding. Best estimates indicate that the United States and European nations provided more than \$300 million in assistance beginning in 2003 for such purposes as training forces, constructing jails, and purchasing communications equipment and vehicles, with the CIA providing the vast bulk of that assistance. Weisman (2003a,b); Zacharia (2003); European Commission (2003).

Table 3.5
Annual Cost of Rebuilding the Palestinian Internal Security System (in millions of 2003 US\$)

General Reconstruction Costs	
Police force equipment and training	168.2
National security force equipment and training	39.8
Civil defense force equipment and training	17.4
Preventive security force, coast guard, intelligence equipment and training	177.1
Judge, prosecutor equipment and training	4.3
Forensic and other technical aid	0.7
National security communications network	12.8
Operating expenditures for police, security forces	118.1
Operating expenditures for justice (including prisons)	7.4
Rebuilding courts and other justice facilities	19.2
Rebuilding prison facilities	14.2
Rebuilding detention facilities	19.8
Rebuilding police stations, firehouses, Ministry of Interior buildings	13.1
Subtotal	612.1
Low Military Option: 1,000 Forces	
Military personnel	43.4
Civilian personnel	1.1
Personnel support	9.4
Operating support	68.0
Transportation	15.8
Subtotal	137.7
High Military Option: 15,000 Forces	
Military personnel	650.7
Civilian personnel	16.1
Personnel support	141.0
Operating support	1,020.0
Transportation	237.6
Subtotal	2,065.4
Total Annual Costs	
Low estimate	749.8
High estimate	2,677.5

NOTES: Military and civilian personnel include the incremental costs of deploying forces into the Palestinian theater of operations—for example, hazard pay and costs associated with paying reserve personnel called to active duty. Personnel support includes food, water, equipment, and medical costs. Operating support includes the operation and maintenance of all forces involved in the Palestinian peace-enabling force. It comprises incremental costs for increasing flying hours; equipping and maintaining ground forces; buying equipment; maintaining command, control, and communications functions; and fixing or replacing damaged equipment. Transportation includes moving soldiers and equipment to the area of operations from bases in the United States and around the world.

Table 3.6
Ten-Year Cost of Rebuilding the Palestinian Internal Security System (in millions of 2003 US\$)

General Reconstruction Costs	Ten-Year Total, 3% Population Growth	Ten-Year Total, 5% Population Growth
Police force equipment and training	1,928.0	2,115.4
National security force equipment and training	456.7	501.1
Civil defense force equipment and training	199.0	218.3
Preventive security force, coast guard, intelligence equipment and training	2,030.8	2,228.1
Judge, prosecutor equipment and training	48.9	53.7
Forensic and other technical aid	8.1	8.9
National security communications network	146.8	161.1
Operating expenditures for police, security forces	1,353.8	1,485.4
Operating expenditures for justice (including prisons)	84.8	93.1
Rebuilding courts and other justice facilities	220.2	241.6
Rebuilding prison facilities	163.1	179.0
Rebuilding detention facilities	226.7	248.8
Rebuilding police stations, firehouses, Ministry of Interior buildings	150.1	164.6
Total	7,017.0	7,699.1

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CHAPTER FOUR

Demography*Kevin F. McCarthy and Brian Nichiporuk***Summary**

In the four and one-half decades since the 1948 Arab-Israeli War triggered the first wave of the Palestinian diaspora, the size of the Palestinian population has increased almost sixfold (from approximately 1.5 million to almost 9 million). Throughout the first three decades of this period, the dominant demographic feature of this population was its increasingly geographic dispersion. Today, almost 40 percent of the Palestinian population lives within the boundaries of what would be a new Palestinian state (the West Bank and Gaza); another 50 percent is living in the four states near the West Bank and Gaza; and about 10 percent is living farther abroad.

Over at least the last two decades, however, the Palestinian diaspora appears to have ended, primarily as a result of a growing reluctance of the traditional destination states to allow additional Palestinians to settle. As a result, the growth of the Palestinian population has become increasingly concentrated within the boundaries of the West Bank and Gaza, where the most prominent feature of Palestinian demography has been the population's very high fertility. When combined with the possibility of large-scale return migration by diaspora Palestinians, this high fertility increases the probability of rapid population growth in the Palestinian territories for the foreseeable future.

Such rapid growth rates (currently about three times the world's average) are almost certain to pose a host of problems for a new Palestinian state. For example, given the poor condition of its infrastructure and its limited natural resources (most especially land and water), rapid population growth will stretch the ability and increase the costs of providing basic resources (water, sewerage, transportation) to Palestinian residents. Similarly, the Palestinian population's extreme youth (a byproduct of its high fertility) will tax the physical and human capital required to provide such essential services as education, health care, and housing, as well as placing a heavy financial burden for funding these services on a disproportionately smaller working-age population. Finally, a new Palestinian state will be hard-pressed to provide jobs not just for its current workers but also for the rapidly growing number of young adults who will be entering the labor force.

Although dealing with these challenges will be difficult given the current size of the population, they could prove to be even more daunting if the current rapid pace

of growth does not abate. As the projections of future population by both the Palestinian Central Bureau of Statistics (PCBS) and the United States Bureau of the Census (USBC) make clear, the prospects for future Palestinian population growth hinge on the future course of fertility and migration. Currently, total fertility rates, a measure of the average number of children per woman and the key indicator used to project future fertility, are 6.9 in Gaza and 5.6 in the West Bank. These rates are among the highest in the world and much higher than the 2.1 children per woman needed for a population to replace itself. Although there are clear signs that these fertility rates are declining, the rate of that decline is very uncertain. As a result, the projections of the growth on the population between 2005 and 2025 span a very wide range—from a low of 5.4 million (about 70 percent higher than at present) to a high of 8.1 million (160 percent higher than at present). How many Palestinians return to a new state and when they arrive will also affect the future growth of the population both directly (in the form of additional residents) and indirectly (in the form of the children they bear after they return).

What can we expect in terms of future changes in fertility and mortality? In the short run, regardless of any declines in fertility rates, the number of births seems certain to increase given the fact that the number of Palestinian women in the prime childbearing years will more than double. Over the longer term, however, fertility rates will begin to decline. Whether these declines will lower the total fertility rate to replacement levels (as we assume in our low projection), or by 50 percent (as we assume in our medium projection) or by only 30 percent (as we assume in our high projection) would seem to depend upon the degree to which Palestinian women's education levels and labor force participation rise—since education appears to play a major role in determining both desired and actual childbearing patterns.

There is also considerable uncertainty surrounding the number of diaspora Palestinians who might move to a new Palestinian state. In their population projections, the Palestinian Central Bureau of Statistics and the United States Census Bureau estimate between 100,000 and 500,000 returnees. Our own estimates, based on assumptions about which groups of Palestinians (those living in camps, registered refugees, etc.) will be most likely to return and under what conditions, are somewhat higher. Which set of estimates will prove to be most accurate will depend upon the terms of the final agreement and social, political, and economic developments in the new Palestinian state.

Introduction

It has been over five decades since one could unambiguously link Palestine as a geographically identified state with the Palestinians as a people. This situation may be changing. If Israeli-Palestinian negotiations follow the "Roadmap" for peace proposed by President Bush, an independent and territorially defined Palestinian state could

emerge rapidly. But declaring independence and forming a government will be only the most visible components of building a Palestinian state. Government agencies must be established; the health and welfare of the population must be provided for; the population must be educated; infrastructure and basic resources such as water, sewer, and transportation must be made available; and a viable economy established.

As is true for any state, demographic issues will help shape this state-building process in at least four ways. First, at the most basic level, a nascent Palestinian state must address the question of who among those of Palestinian lineage will qualify for citizenship and, just as importantly, who will have the right to settle in the newly independent Palestine. The answers to these questions can be assumed for most countries, but—given the history of the Palestinian people and its diaspora, Palestinian relations with Israel, and the political cleavages within the Palestinian population—these questions are of central importance to the future of a Palestinian state and how it will be viewed by Palestinians and others. Second, how these questions are answered, and thus which and how many Palestinians qualify for residence in the new state, will help determine the state's practical viability in terms of the balance between numbers of residents and the availability of basic resources. Third, the political viability of future Palestinian governments will depend upon their ability to meet the service requirements of their citizens. In large part, the demand for these services and the state's ability to supply them will be determined by the future number and characteristics of Palestinian residents. Finally, a central requirement for any future Palestinian government will be its ability to ensure that its residents can make a living. Demographic factors will influence the economic viability of a new state both because they determine the number of jobs required to employ the labor force and because the labor force itself will be one of the new state's most important economic resources.

This chapter describes the demography of the Palestinian people and how the characteristics of that population will affect each of the four key issues mentioned above: the number of residents in the new state, the balance between residents and resources, the new state's service requirements, and the ability of residents to make a living. It begins with a review of the post-1948 history of the Palestinian population and estimates how many Palestinians there are and where they are located. It then describes in some detail the characteristics of the population currently living in the West Bank and Gaza, with a particular focus on those features of the population that are likely to affect the balance between resources and population, the service needs of that population, and the demands they are likely to impose on the economy. It next explores various projections of the future growth of the population in the West Bank and Gaza as well as the feasibility of the assumptions underlying those projections.

We then turn to the links between the demography of the Palestinian population and the four issues identified above. We first examine the issue of the carrying capacity of the new state, what resources are available, and what they imply about the feasible size and distribution of that population. Next, we examine how the size and charac-

teristics of that population will affect social service demand. Then, we turn to the implications of demography for the economy of a new Palestinian state. This discussion examines both the implications for the number of new jobs that will need to be created and the short- and longer-term prospects for the viability of the Palestinian economy.

Finally, we explore the critical issue of return migration of diaspora Palestinians to the new state and the tensions that this issue will almost certainly create between the legitimacy of the state and the pressures that substantial return migration will impose on the state's carrying capacity, service demands, and economy.

The Palestinian Population and Its Post-1948 Diaspora

Questions about how to define the Palestinian population and which elements among that population will be entitled to settle in Palestinian territory arise because of the rapid growth of that population and its dramatic diaspora since the 1948 Arab-Israeli War and the creation of the state of Israel. Prior to that war, approximately 1.5 million Palestinians lived in what was then Mandate Palestine. Today, the roughly 8.8 million people of Palestinian lineage are scattered across the globe—although the vast majority remain in the West Bank, Gaza, and nearby countries (see Table 4.1).

A little less than 40 percent of the Palestinian population is currently located in the Palestinian territories (the West Bank and Gaza), and approximately 50 percent are in the four countries surrounding those territories, with the largest single concentra-

Table 4.1
Distribution of the Palestinian Population by Region of Residence, 1995 to 2002

Region	Population (millions)		1995–2002 % Change	Distribution 2002 (%)
	1995	2002		
Palestine Territories	2.51	3.39	35.1	38.7
West Bank	1.63	2.16	32.5	24.7
Gaza	0.88	1.23	39.8	14.0
Surrounding Countries	3.55	4.52	27.3	51.6
Jordan	1.98	2.72	37.4	31.1
Lebanon	0.39	0.40	2.6	4.6
Syria	0.36	0.40	11.1	4.6
Israel	0.82	1.00	22.0	11.4
Far Abroad	0.71	0.83	16.9	9.5
Balance of Middle East	0.51	0.54	5.9	6.2
Others	0.20	0.29	45.0	3.3
Total	6.77	8.76	29.4	100.00

SOURCE: 1995 estimates from Adlakha et al. (1995); 2002 estimates from PCBS (2002).

tion in Jordan (about one-third of the total Palestinian population). Slightly less than 10 percent of all Palestinians are located in “far abroad” regions. About two-thirds of the “far abroad” population is located in the Middle East and about one-third outside the Middle East, with the largest single concentration in the United States (about 200,000) and other sizable settlements in Europe and Canada.

Over the past seven years (1995 to 2002), the Palestinian population has increased very rapidly—by about 30 percent, which is more than three times as fast as the world’s population grew during this period. However, the rate at which the Palestinian population is growing varies dramatically depending upon where that population is located. The most rapid growth has occurred in the West Bank, Gaza, and Jordan, where almost three-quarters of all Palestinians now live, and outside the Middle East, where only about 3 percent of the Palestinian population is located. Growth rates have been much lower in other Arab countries (Syria, Lebanon, and the balance of the Middle East). Growth rates in Israel, where about 10 percent of the Palestinians are located, fall between these two groups.

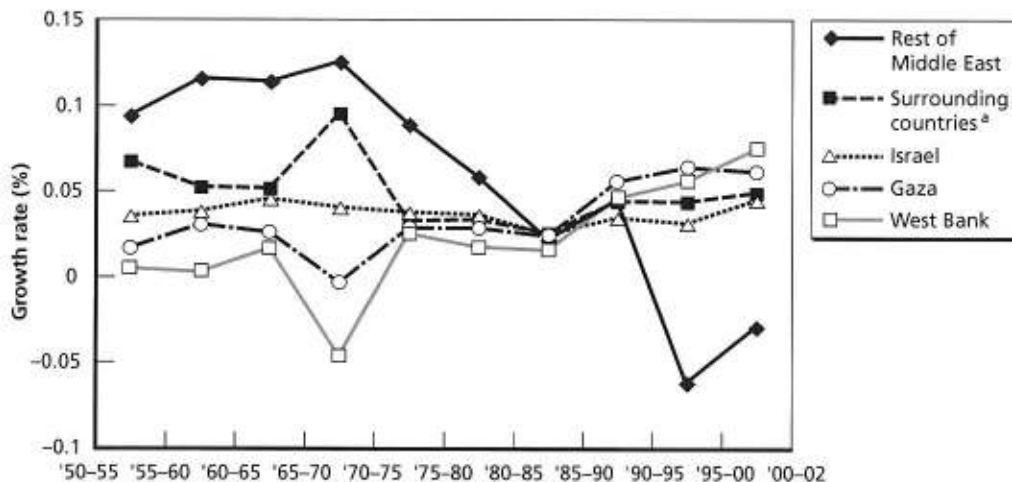
These differences in growth rates largely reflect different demographic dynamics. Rapid population growth in the Palestinian territories is largely a by-product of the extremely high fertility of the Palestinian population in the West Bank and Gaza. Total fertility rates (a measure of the average number of children per woman) are 6.9 in Gaza and 5.6 in the West Bank—many times higher than the 2.1 children per woman required for a population to replace itself (PCBS 2003b).

The Palestinian population in Jordan has also grown significantly due to the repatriation of close to 300,000 Palestinians who relocated to Jordan from Kuwait following the U.S.-led eviction of Iraq from Kuwait during Operation Desert Storm. The rapid increase in the number of Palestinians living outside the Middle East (although starting from a small base) is primarily a function of migration to these areas. The slower rates of growth in the balance of the Middle East reflect somewhat lower fertility rates in these countries (although still well above the level required for replacement) and what appears to be a reversal of the formerly rapid pace of in-migration by Palestinians to these areas.

Indeed, the increasing concentration of the Palestinian population in the West Bank, Gaza, and Jordan reflected in Table 4.1 represents a marked contrast to the increasing dispersal of the Palestinian population that characterized most of the post-1948 era. This dispersal, typically referred to as the Palestinian diaspora, is depicted in Figure 4.1, which plots the average annual rate of growth of the Palestinian population in five-year intervals from 1950 to 2002 in the five areas containing the vast majority of the Palestinian population.¹ Since Israel has tightly controlled migration into its territory, the growth rate of its Palestinian population provides a measure of the natural

¹ The surrounding states include Syria, Lebanon, and Jordan. Most of the Palestinians living in the balance of the Middle East live in the Gulf region.

Figure 4.1
Growth Rates of Palestinian Population by Area of Residence, 1950–2002



SOURCE: McCarthy (1996), USBC (1999; 2003a, b).

^aSyria, Lebanon, and Jordan.

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increase of the Palestinian population throughout this period.² Deviations around this line reflect the influence of migration and thus provide a history of the movement of the Palestinian population throughout the diaspora.

Although Figure 4.1 begins with 1950–1955, the first wave of refugees—approximately 700,000—actually left or were expelled during and shortly after the end of the 1948 war. These 1948 refugees and their descendants settled in the West Bank, Gaza, southern Lebanon, Jordan, and Syria.

Apparently, most of those who settled in Gaza came from Jaffa and villages south of Jaffa; those who lived in the northern half of what is now Israel, including a substantial group from Haifa, moved north into Syria and Lebanon.³ Despite this outflow, over three-quarters of the initial Palestinian population was still located in the West Bank and Gaza in 1950 (McCarthy, 1996).

During the next 15 years (1950 to 1965), Gaza and especially the West Bank experienced very modest growth (well below the growth rate of the Palestinian population in Israel, which was driven almost exclusively by natural increase) suggesting that,

² The growth of Israel's Palestinian population no doubt understates the actual rate of natural increase, since there has certainly been some outmigration of Palestinians from Israel during this period. The most salient fact about the use of Israel's Palestinian population as a standard against which to measure natural increase, however, is the absence of any substantial amount of immigration.

³ See historical review of Palestinian refugee movements at <http://www.globalexchange.org/countries/palestine/refugeeFacts>.

subsequent to their initial resettlement, there was considerable movement of the original refugees and their descendants to other areas of the Middle East. This movement is reflected in the rapid growth of the Palestinian populations both in the surrounding states and, in particular, in other areas of the Middle East. In fact, most of this growth took place in the Gulf states, which imported skilled Palestinians to fill managerial and professional jobs during the massive development programs that they began during this period. The number of Palestinians living in the balance of the Middle East increased almost fourfold during this period. In addition, Jordan's investment in East Bank development encouraged significant migration from the West Bank (annexed by Jordan in 1950) to the East Bank during this period.

The 1967 Six-Day War triggered a second major outflow of Palestinians from the West Bank and Gaza. Approximately 150,000 to 200,000 Palestinians were displaced by this war (reflected in the negative growth in the West Bank and Gaza during this period), most of whom moved to the surrounding Arab states, especially Jordan, and to a lesser extent elsewhere in the Middle East.

Since the 1970s, however, the rate of movement of Palestinians around the Middle East appears to have dropped off—a pattern that is apparent in the convergence of growth rates after 1980. Four major factors have influenced this reversal of prior migration patterns. First, the Gulf states became increasingly reluctant to import Arab labor, including Palestinian workers, during the late 1970s and 1980s—a phenomenon that is reflected in the steady decline in the growth rate of their Palestinian populations after 1970. Initially this reluctance was driven by security concerns about the political integration of Palestinian guest workers—a concern that culminated in the expulsion of more than 300,000 Palestinians from Kuwait after the Gulf War ended in 1991. More recently, it has been driven by rising unemployment among the indigenous populations of these countries and national policies designed to substitute native for foreign-born workers.

Second, with the exception of Jordan, where over half of the population is already of Palestinian origin and where most of the Palestinians expelled from Kuwait appear to have settled, the surrounding states have become considerably less willing to resettle Palestinians. This situation is most pronounced in Lebanon, where the Palestinian population has been marginalized both economically and politically as a result of its being caught in the middle of ethnic and religious divisions that have periodically erupted in armed conflict. Indeed, the Lebanese government has made it clear that it wants the Palestinian population to return to Palestine as soon as possible. Although the Palestinians living in Syria are better integrated into the local economy, their political rights remain circumscribed.

Third, although the Palestinian population outside the Middle East has never been large, the willingness of countries in North America and Europe to resettle substantial numbers has, no doubt, declined sharply since the events of 9/11.

Finally, the Oslo Accords and the establishment of the Palestinian Authority in the West Bank and Gaza have rekindled the prospect of a return to Palestine and,

despite periodic intifadas and violence between Palestinians and Israelis, increased the attractiveness of Palestine as a final destination, particularly in contrast to what appears in general to be a growing reluctance of other Arab states to accept large numbers of Palestinian migrants.⁴

Several key points emerge from this brief history of the Palestinian population since the 1948 war. First, although war and civil turmoil have played a significant role in the dispersion of the Palestinian population over the past 55 years, there also appears to have been a considerable amount of economically motivated migration. This pattern suggests that political and economic prospects will play a significant role in determining where diaspora Palestinians choose to settle over the long run. Second, the diaspora—the movement of Palestinians around the world—appears to have terminated at least two decades ago. This change appears to be due less to the integration of the Palestinian population into the various countries in which they have settled than to a growing reluctance of the traditional destination countries to resettle additional Palestinians. Third, although much of the rhetoric surrounding the establishment of a Palestinian state has revolved around the return of Palestinian refugees from the 1948 and 1967 conflicts, in fact, the number of surviving refugees and displaced persons is likely to be dwarfed by the number of their descendants, many of whom will have never lived in Palestine. Using data for the first half of the 1990s, for example, we estimated that, at that time, the refugees were outnumbered by their descendants 7 to 1. That ratio has most likely increased substantially since then. Finally, as the movement of Palestinians across international borders has dropped off precipitously, the growth and distribution of that population has been increasingly shaped by natural increase. This has been particularly true of the Palestinian population in the West Bank and Gaza. As we will discuss below, the rapid growth of that population due to very high fertility levels will pose real challenges for a future Palestinian state. These challenges will only be intensified by the return of a substantial number of the diaspora Palestinian population.

A Profile of the Population in the West Bank and Gaza

Barring a large-scale return of Palestinians from abroad (a topic to which we will return in the section titled “Prospects for Return Migration”), the population most likely to affect the operation of a future Palestinian state is the one currently living in the West Bank and Gaza, along with its descendants. Three demographic factors stand out: the total size of that population, its future growth, and its age structure. Population size and growth are directly relevant to a state’s carrying capacity; its age structure is particularly important in shaping both the demand for services and the state’s ability to provide those services.

Virtually all demographic phenomena (births, deaths, marriage, childbearing, and migration), many economic behaviors (entering and retiring from the labor force), and

⁴ Survey research conducted by Khalil Shikaki (2003) provides recent empirical data on the attractiveness of a new Palestinian state as the destination of choice for most refugees.

many other key decisions and behaviors (obtaining education and training, setting up a household) typically occur within certain age ranges. From a societal point of view, three age groups are particularly noteworthy: the young population (both preschoolers and those who are still in school); the working population; and those who have retired from the labor force. Although the services they use differ, both the young and the retired populations are intensive service users. The costs of providing those services are largely borne by the working-age population either directly (through cross-generational transfers) or indirectly (through taxes). Thus, the relative sizes of these different groups will directly affect both the nature and amount of services a population demands and the ability to provide those services.

As noted in Table 4.1, a little less than 40 percent of the total Palestinian population worldwide currently lives in the West Bank and Gaza. The total population of the West Bank is three-quarters larger than that of Gaza, but between 1995 and 2002, the growth rate in Gaza was 22 percent higher than in the West Bank. The higher growth rate in Gaza is due partly to the return of about 100,000 Palestinians to Gaza, where the seat of Palestinian government was initially located after the signing of the Oslo Accords, and partly to a higher fertility rate in Gaza (although different sources report different estimates of those rates⁵). Whatever the actual rates, they are clearly very high by any standard. The U.S. Census reports that the worldwide fertility rate in 1998 was 2.9; as we have already noted, a rate of 2.1 is sufficient for population replacement.⁶

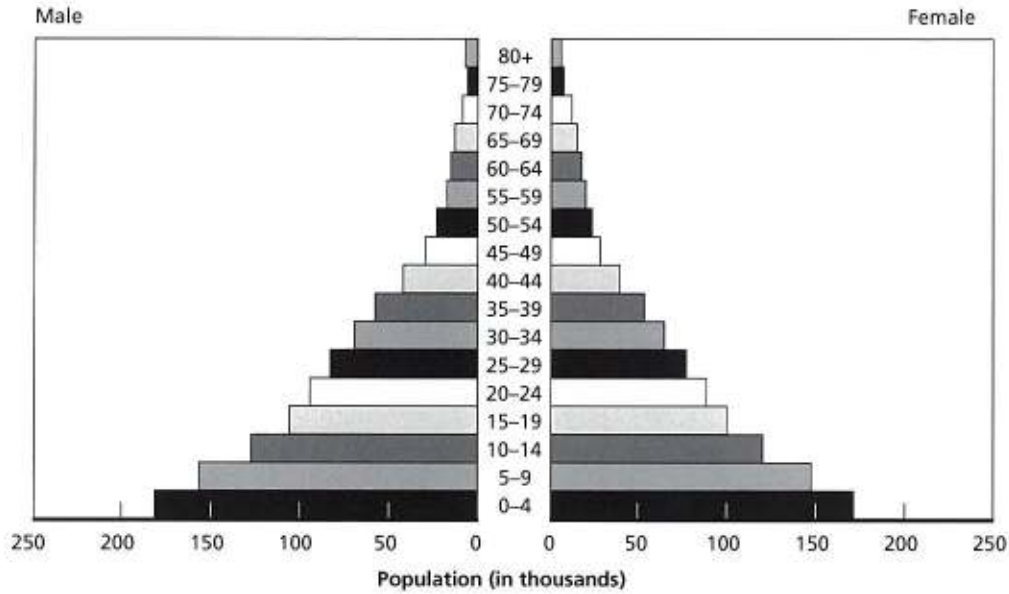
A direct consequence of high Palestinian fertility is a very young age structure. Figures 4.2 and 4.3 present the age-gender structures of the West Bank and Gaza in the form of a population pyramid. Population pyramids show the size of each successive male and female age cohort of the population. These pyramids are typical of societies with high fertility and very rapid growth. This pattern is reflected in the fact that the youngest cohort is the largest single age grouping. As one moves up the age pyramid, each successive cohort is smaller than the one that preceded it. Both of these population pyramids are dominated by youth (those who are less than 20 years old), who make up the vast majority of the population. The median age of these populations, for example, is 16, meaning that half of the total population is 16 or younger.

A clearer picture of the implications of this age structure on the demand for social services in these populations can be obtained by combining these individual age groups into the five age categories identified above as most relevant to service demand: pre-

⁵ The Palestinian Central Bureau of Statistics reports discrepant estimates of total fertility rates for the West Bank and Gaza. In an analytical report on fertility patterns in Palestine (PCBS, 2003b), the total fertility rates for the West Bank and Gaza are reported as 4.5 and 5.4 for the years 1997 to 1999. In its statistical fact sheet, the PCBS reports total fertility rates of 5.5 and 6.8 for the West Bank and Gaza, respectively, for 2002. The most recent population projections by the PCBS use total fertility rates of 5.6 and 6.9 for the West Bank and Gaza, respectively. The U.S. Bureau of the Census World Population Profile (1999) reports that the 1998 total fertility rates for West Bank and Gaza were 4.9 and 7.6, respectively. Its most recent projections use the 5.6 and 6.9 figures.

⁶ The Census estimates that the average total fertility rate for the Middle East as a whole was 4.4, the highest for any region. For less-developed countries as a whole, the rate is 3.2; for the developed countries, 1.6 (U.S. Bureau of Census, 1999).

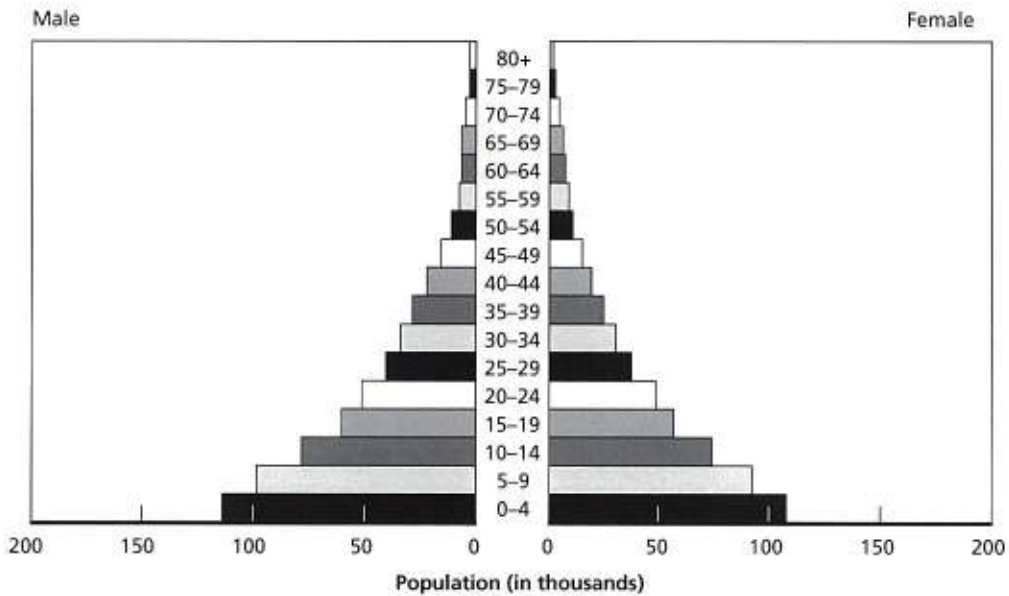
Figure 4.2
Age Pyramid for West Bank, 2000



SOURCE: U.S. Census Bureau, International Data Base.

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Figure 4.3
Age Pyramid for Gaza, 2000



SOURCE: U.S. Census Bureau, International Data Base.

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schoolers (ages 0 to 4), the school-age population (ages 5 to 19), younger (ages 20 to 44) and older workers (ages 45 to 64), and retirees (age 65 and above), and comparing the size of these groups in the Palestinian territories to their counterparts in other areas. The three comparison groups used here are the Middle East (the fastest growing region of the world), the less-developed countries, and the more-developed countries. These comparisons are reported in Table 4.2.

As might be expected, this comparison highlights the sharp differences in age structure between the populations of the West Bank and Gaza and of developed countries. However, the data presented in Table 4.2 also reveal that the Palestinian population is significantly younger than that of less-developed countries as a whole, and younger than other populations in the rapidly growing Middle East. Not surprisingly, these differences are most pronounced on a percentage basis at the extremes of the age distribution—for example, there are more than three times as many preschool-age children on a percentage basis in the Palestinian territories as in the developed countries, but only one-fifth as many retirees. However, significant differences are also readily apparent among both the school and working-age populations. The school-age population is almost twice as large as that of developed countries and one-quarter larger than that of developing countries. Conversely, the proportion of the population of working age is significantly smaller than in all the other areas listed.

These differences in age structure are likely to have profound effects, at both the state and individual household levels. At the state level, for example, they not only will affect the types and cost of services that must be supplied but may also influence state-funded capital investments—resources allocated to current consumption cannot be devoted to investments. Similarly, larger household sizes (a direct by-product of high fertility) will affect household resource allocation decisions. The more money that must be devoted to meeting basic household needs (food, housing, clothes, etc.), the less that is available for investing in education, training, and accumulating private capital.

Table 4.2
Comparison of Selected Age Groups (% of total population)

Age Group	Palestinian Territories			Middle East	Less-Developed Countries	Developed Countries
	West Bank	Gaza	Total			
Preschool (0–4)	17.5	19.8	18.4	14.1	11.6	5.7
School age (5–19)	39.0	40.9	39.2	34.8	31.8	20.0
Early workers (20–44)	22.8	20.4	21.9	34.5	37.8	36.8
Late workers (45–64)	7.5	8.0	8.0	11.9	20.2	23.3
Retirees (65+)	3.3	2.5	2.9	4.3	4.9	14.2

SOURCE: Palestinian Population from 1997 Census of Population, PCBS (1999). Data for other countries from USBC (1999).

Given the youthfulness of the Palestinian population, we would expect that, at both the governmental and private levels, major expenditures will need to be made for housing, education, and health care (especially for young children and the elderly). Moreover, given the high dependency ratios in the Palestinian population, the resources required for these expenditures will pose a proportionately greater burden on the working-age population, through either taxes (if the state provides these services directly) or intergenerational transfers (if they are primarily provided within the family). The extent of that burden will, of course, vary with the level of expenditures, but there is no question that there are many fewer Palestinian workers per preschool and school-age child (the ratio is 0.73 workers per child in the West Bank and 0.60 in Gaza, compared with 3.1 in developed countries, 1.2 in developing countries, and 0.96 in the Middle East as a whole).

Prospects of Future Population Growth in the West Bank and Gaza

The pressures its population will pose for a new Palestinian state will depend not only on the population's current size and structure but also on how these features change in the future. As in all populations, such changes are produced in two ways: through natural increase (the difference between births and deaths), and net migration (moves into and out of the country). In this section, we first discuss the mechanics of population growth and how they will condition the timing and amount of future growth in the Palestinian territories. We next present different projections of future population growth. Finally, we discuss the assumptions underlying those projections and their implications for the actual course of growth.

Dynamics of Future Population Growth

Of the two determinants of natural increase, the future course of fertility in the West Bank and Gaza is considerably more uncertain than the future course of mortality. Indeed, in contrast to the much higher levels of fertility in Palestine than in other developing regions, mortality patterns are notably lower there than in the rest of the developing world. For example, the infant mortality rates in the West Bank and Gaza (27 and 24 per 1,000) lie between those in the developed countries (9 per 1,000) and those in both the Middle East (45 per 1,000) and the developing world (58 per 1,000). The same pattern is evident in comparisons of life expectancy.⁷ In fact, the two most notable projections of future population growth in the West Bank and Gaza (those made by the Palestinian Central Bureau of Statistics and by the United States Census Bureau) both assume minor improvements in mortality for the foreseeable future.⁸

⁷ Life expectancy is 71 years in Gaza and 72 in the West Bank, compared with 75 in developed countries, 69 in the Middle East as a whole, and 63 in the developing world.

⁸ The USBC, for example, projects that life expectancy will increase by approximately 6 percent in both the West Bank and Gaza between 2000 and 2025.

Correspondingly, what happens to fertility patterns will principally determine the future growth of the population in a new Palestinian state. Both the PCBS and the USBC project that fertility rates among the Palestinian population will decline in the future, but these declines will not immediately result in fewer births. The number of births is a product of both a population's fertility rates and its age structure; the age structures of the populations in the West Bank and Gaza are particularly conducive to high birth rates. This pattern is reflected in Table 4.3, which compares relevant measures of both fertility behavior and age structure in the West Bank and Gaza with comparable measures in the remainder of the Middle East, developed countries, and developing countries. As we noted above, the total fertility rate among Palestinians is substantially higher than elsewhere, including the rest of the Middle East. In addition, a substantially larger fraction of Palestinian women are in the prime childbearing years (ages 15 to 44). Moreover, the number of women in the childbearing ages (all of whom are already born) will increase by over 40 percent in the West Bank and by almost 60 percent in Gaza during the current decade.

Projected Growth

Since the number of births to a population is a product of the rate at which women bear children and the number of women in the childbearing years, fertility rates would need to drop both very substantially and very rapidly to keep the number of births from rising from their current (already high) levels—at least for the next decade. In fact, both the PCBS and USBC projections assume that Palestinian fertility rates will decline by only between 20 and 25 percent during the current decade—substantially less than the much more certain rise in the number of women in the childbearing years. Thus, even if fertility rates follow the expected downward pattern, the number of births (and correspondingly, the absolute growth of the Palestinian population in the West Bank and Gaza) can be expected to expand for at least the next decade.

Although continued decline in fertility rates will eventually result in a decline in the number of women in the childbearing years, the size and timing of that decline will

Table 4.3
Selected Comparisons of Fertility Potential of the Palestinian Population, 1998

Area	Total Fertility Rate	Women in Childbearing Years (ages 15–44)	
		% Adult Women	% Change, 2000–2010
Gaza	6.8	84	58
West Bank	5.5	83	42
Middle East	4.4	80	31
Developed countries	1.6	60	–3
Developing countries	3.7	71	17

SOURCE: USBC (1999).

depend upon how quickly and how far fertility rates drop. This phenomenon is often referred to as the “momentum” of population growth and can take decades to play out. The importance of this momentum and the degree to which it will continue to operate in a new Palestinian state is particularly relevant in light of potential increases in economic growth and productivity that can result from the so-called “demographic bonus.” This term refers to the drop in dependency ratio (the ratio of children and elderly to the working-age population) that occurs when rapidly declining fertility reduces the number of births relative to the working-age population before the effects of previously high fertility rates begin to increase the size of the elderly population. Such a decline in the dependency ratio can allow countries to increase the resources they devote to investment rather than consumption and thus increase productivity and economic growth. Although this bonus appears to have played a role in the growth of such countries as Korea and Taiwan and, some predict, may soon occur in other Middle Eastern countries, it will not begin to operate in Palestine before 2015 at the earliest.

The second major component of growth in Palestine is net migration. As we have already suggested, how many and which diaspora Palestinians return to a new Palestinian state will play an important role in determining the legitimacy of that state. How these issues are resolved will, of course, be determined by the political negotiation process. But the outcome of those political negotiations can have a significant influence on the future demography of a new state. This effect will have both direct and indirect components.

Clearly, the larger the number of diaspora Palestinians who move to Palestine, the larger the direct addition to the resident population. In addition to this direct effect, however, migrants will indirectly increase the size of the population through childbearing after they migrate. The importance of this indirect effect will depend upon the timing of the return migrants (the sooner the migrants return, the larger the effect), the characteristics of the migrants (the higher their fertility, the larger the effect), and, of course, the number of migrants (the more migrants, the larger the effect).

As we have already noted, both the PCBS and the USBC have made projections of future population growth in the West Bank and Gaza for the period 2000 to 2025.⁹ Table 4.4 presents the results of the PCBS’s medium projection. The assumptions underlying these projections are reported in the notes to the table. As the results make clear, the population of a new Palestinian state is projected to increase rapidly over the next 25 years. The population of the West Bank, for example, is projected to more than double, and, consistent with its higher fertility rate, Gaza’s population is projected to increase by over 160 percent. The population of the combined West Bank and Gaza is projected to increase by 133 percent.

Although the total amount of growth is projected to remain at approximately 800,000 per five-year period during the 25 years covered by this projection, the overall

⁹ The PCBS and the USBC appear to have used the same fertility and mortality assumptions in their projections. As we note below, they differ only in the assumptions about net migration.

Table 4.4
PCBS Medium Projections of Population Growth in West Bank and Gaza Between 2000 and 2025 (estimates in thousands)

Year	West Bank	Gaza	Total
2000	2,017	1,142	3,159
2005	2,541	1,472	4,013
2010	3,061	1,868	4,929
2015	3,517	2,241	5,758
2020	3,962	2,618	6,580
2025	4,409	2,993	7,402

NOTES: Key assumptions—Mortality: Infant mortality rate will decrease by 50 percent between 1995 and 2025 and life expectancy at birth will increase by 6 percent. Migration: Net migration into the Palestinian territories will total 500,000 between 1997 and 2011. Net migration between 2011 and 2025 is assumed to be zero. Fertility: The total fertility rate will decline by 50 percent by 2025.

growth rate in the Palestinian territories is expected to decline from its current annual rate of just under 4 percent to about 2.2 percent.¹⁰ In both cases, however, the annual growth rate is expected to increase in the short term because the projections assume that approximately 500,000 net migrants will enter the Palestinian territories prior to 2011.¹¹

As is true of all population projections, the accuracy of these projections depends upon the accuracy of the assumptions about the future course of fertility, mortality, and net migration that underlie the projection. In recognition of this fact, the PCBS has produced alternative projections using different assumptions about how rapidly total fertility rates will decline over the next 25 years. Although the USBC uses essentially the same set of assumptions as the PCBS about how fertility and mortality patterns will change over the next 25 years, each agency uses a different set of assumptions about net migration.¹² Combining these two sets of projections, we can see how the total population of a new Palestinian state might change under alternative assumptions. The results of this comparison are reported in Table 4.5.

Not surprisingly, the projected change in total population varies dramatically depending upon the assumptions that are made about the future course of fertility and migration in a proposed Palestinian state. Although the total population in the combined Palestinian territories will increase substantially regardless of the assumptions

¹⁰ The respective declines in annual growth rates differ somewhat between the West Bank and Gaza in this projection. The rate in the West Bank is projected to drop from its current rate of 3.81 percent to about 2 percent. The rate in Gaza is projected to decline from its current rate of 4.3 percent to 2.49 percent (PCBS, 2003c).

¹¹ The accuracy of these migration assumptions is examined in more detail in the section entitled "Prospects for Return Migration," which compares these assumptions with estimates based on survey data on the location preferences of diaspora Palestinians.

¹² The PCBS assumes that 500,000 net migrants will enter the West Bank and Gaza between 1997 and 2011; the USBC assumes that the corresponding figure for that period will be 100,000. Both agencies have assumed zero net migration after 2010.

Table 4.5
Projections of Total Palestinian Population in 2025 Under Alternative Fertility and Migration Assumptions

Fertility	Net Migration 1997 to 2011 (thousands)	
	Low	High
Low	5,352	6,232
Medium	6,422	7,402
High	7,125	8,125
	% Change from 2000	
	Low	High
Low	69.4	97.3
Medium	103.3	134.3
High	125.5	157.2

NOTES: Fertility assumptions—Low: Total fertility rate will decline to replacement level (2.1) by 2025 in the West Bank and Gaza. Medium: Total fertility rate will decline by 50 percent in both West Bank and Gaza by 2025. High: Total fertility rate will decline by 30 percent in both West Bank and Gaza by 2025. Migration assumptions—Low: 100,000 net migrants between 2000 and 2010; High: 500,000 net migrants between 2000 and 2020.

used, the range between the lowest and highest projections of total population is over 50 percent (5.4 to 8.1 million). Correspondingly, the projected percentage growth in the total population between 2000 and 2025 might range from a little under 70 to almost 160 percent.

The magnitude of the expected decline in fertility and the scale of net migration will both make a substantial difference in the size of the Palestinian population in 2025. For example, if the fertility rate in the Palestinian territories were actually to decline to the replacement level, the total population would be almost 1.2 million smaller than if it declined by only 50 percent during that period. However, if fertility rates were to decline by 30 rather than 50 percent, the total population would be almost three-quarters of a million larger. Similarly, an increase of 400,000 migrants by 2010 would increase the total population by almost one million people.¹³

Accuracy of the Underlying Assumptions

As we suggested above, projections of future population growth are not predictions of what will actually occur. Instead, the accuracy of any projection depends upon the accuracy of the assumptions that drive it. Since we will discuss the issue of diaspora

¹³ The difference in USBC and PCBS medium projections in 2025 is 980,000. This difference is due to the PCBS's assumption of 500,000 net migrants by 2010 versus the USBC's assumption of 100,000 net migrants. The fact that the total difference in these two projections substantially exceeds the difference in net migrants reflects natural increase among the migrants.